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15		DISTRICT COURT
16	UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA OAKLAND DIVISION	
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20	EPIC GAMES, INC.,	No. 4:20-CV-05640-YGR
21	Plaintiff,	DECLARATION OF ANDREW GRANT IN SUPPORT OF PLAINTIFF
22	VS.	EPIC GAMES, INC.'S MOTION FOR PRELIMINARY INJUNCTION
23	APPLE INC.,	Date: September 28, 2020, 9:30 a.m. (via
24	Defendant.	Zoom Platform)
25		Courtroom: 1, 4th Floor Judge: Hon. Yvonne Gonzalez-Rogers
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	DECLARATION OF ANDREW GRANT	CASE No. 4:20-cv-05640-YGR

I, Andrew Grant, declare as follows:

- 1. I am a Technical Director of Engineering at Epic Games, Inc. ("Epic"). I submit this declaration in support of Epic's Motion for a Preliminary Injunction. The contents of this declaration are based on my personal knowledge. If called as a witness, I could and would competently testify thereto.
- 2. I have worked as a Technical Director of Engineering at Epic for five years. In this role, I oversee the coding and programming of various projects at Epic. Prior to working at Epic, I worked at Lucasfilm for more than six years supervising software engineering projects. In total, I have 22 years of experience working as a software engineer, and I have worked on engineering projects for iOS and macOS for the last 12 years.

Epic's Developer Accounts

- 3. In order to develop and distribute apps for iOS, a software developer must set up a Developer Program account with Apple. For each account, Apple requires that the developer enter into (1) an Apple Developer Agreement, and (2) an Apple Developer Program License Agreement ("PLA") (or in the case of the Developer Enterprise Program account, a Developer Enterprise Program License Agreement). The developer also must pay Apple an annual \$99 fee for a Developer Program account (or \$299 for a Developer Enterprise Program account).
- 4. Up until August 28, 2020, Epic had a Developer Program account with Apple with a "Team ID" ending in '84. Epic first opened the Team ID '84 account in September 2010 and published its first apps using the account, *Epic Citadel* and *Infinity Blade*, in September and December 2010, respectively. Epic entered into its current Developer Agreement for the Team ID '84 account on September 5, 2019, and a renewal of its PLA for the Team ID '84 account on June 30, 2020. Apple terminated the Team ID '84 account on August 28, 2020. As of the termination, the Team ID '84 account was associated with five consumer-facing apps: *Fortnite*, *Battle Breakers*, *Spyjinx*, *Infinity Blade Stickers* and *Shadow Complex Remastered*.
- 5. Epic currently has a Developer Enterprise Program account with a Team ID ending in 'RR. Epic first opened the Team ID 'RR account in May 2018. Epic entered into its current Developer Agreement for the Team ID 'RR account on September 5, 2019, and a renewal

of its Developer Enterprise Program License Agreement for the Team ID 'RR account on June 30, 2020. Developer Enterprise Program accounts are not used for distributing apps through the App Store. Instead, Epic uses the Team ID 'RR account to develop and distribute apps internally at Epic.

- 6. Five of Epic's affiliates also have separate Developer Program and Developer Program Enterprise accounts pursuant to separate agreements with Apple.
- 7. Epic Games International S.à r.l. ("Epic International") has a Developer Program account with a Team ID ending in '3Y. Epic International first opened the Team ID '3Y account in 2010 and published its first app using the account, *UDK Remote*, in November 2010. Epic International entered into its current Developer Agreement with Apple for the Team ID '3Y account on October 21, 2016, and a renewal of its PLA for the Team ID '3Y account on June 30, 2020. The Team ID '3Y account is currently associated with five non-consumer-facing apps: *Unreal Remote 2, Unreal Match 3, Action RPG Game Sample, Unreal Remote*, and *Live Link Face*. These apps assist developers using or learning how to use the *Unreal Engine*, and they do not offer in-app purchases.
- 8. Life on Air, Inc. ("Life on Air"), formerly YEVVO Entertainment Inc., has two Developer Program accounts with Team IDs ending in 'RG and 'TS. Life on Air entered into its current Developer Agreement with Apple for the Team ID 'RG account on September 2, 2020, and a renewal of its PLA for the Team ID 'RG account on June 25, 2020. The Team ID 'RG account is associated with the *Houseparty* app for iOS and macOS. Life on Air entered into its current Developer Agreement with Apple for the Team ID 'TS account on September 10, 2015, and a renewal of its PLA for the Team ID 'TS account on August 31, 2020. There are currently no apps distributed through the App Store associated with the Team ID 'TS account.
- 9. Life on Air currently has a Developer Enterprise Program account with a Team ID ending in 'Y8. Life on Air entered into its current Developer Agreement for the Team ID 'Y8 account on May 7, 2018, and a renewal of its Developer Enterprise Program License Agreement for the Team ID 'Y8 account on July 14, 2020. Life on Air does not distribute any apps through the App Store with the Team ID 'Y8 account because it is a Developer Enterprise Program

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- 10. Ka-Ra S.A.S. has a Developer Program account with a Team ID ending in 'JU. Ka-Ra S.A.S. entered into its current Developer Agreement with Apple for the Team ID 'JU account on October 21, 2016, and a renewal of its PLA for the Team ID 'JU account on June 30, 2020. There are currently no apps distributed through the App Store associated with the Team ID 'JU account.
 - 11. Psyonix LLC ("Psyonix") has a Developer Program account with a Team ID ending in 'TY. Psyonix entered into its current Developer Agreement with Apple for the Team ID 'TY account on November 14, 2019, and a renewal of its PLA for the Team ID 'TY account on June 29, 2020. There are currently no apps distributed through the App Store associated with the Team ID 'TY account.
 - 12. Epic Games Sweden Scanning AB ("Epic Sweden"), formerly Quixel AB, has a Developer Program account with a Team ID ending in 'T4. Epic Sweden entered into its current Developer Agreement with Apple for the Team ID 'T4 account on March 5, 2020, and a renewal of its PLA for the Team ID 'T4 account on July 15, 2020. There are currently no apps distributed through the App Store associated with the Team ID 'T4 account.
 - 13. To access Apple development tools for both iOS and macOS, including Software Development Kits ("SDKs") and other tools, Apple requires that a developer enter into a separate Xcode and Apple SDKs Agreement. Programmers individually accept this agreement either by clicking "agree" or simply by downloading Apple software or using Apple services covered by the agreement. Epic and certain of its affiliates have entered into separate Xcode and Apple SDK Agreements with Apple. These separate agreements are not tied to any of the Developer Program or Developer Enterprise Program accounts of Epic or its affiliates.

App Distribution and Updates on iOS Devices

14. Apps, including app stores, are programmed to run on a specific operating system and will not run on a different operating system. The only approved way to make an iOS app available for commercial distribution is through Apple's App Store. Unlike on a PC or Mac, an iOS user cannot download an app from a web browser. This is not just Apple's stated policy—it 4

is the result of specific technical restrictions that Apple has built into iOS. In order for an app to run on an iOS device, it must be signed with a certificate issued by Apple. Apple offers several different types of certificates to developers with a developer account. The type of certificate depends on how a developer intends to distribute its app. For example, Apple makes available certain types of certificates for the purpose of developing and testing iOS apps prior to wider distribution. These certificates are subject to various restrictions that limit the scope of use and distribution of the app. Apple also offers a certificate to developers with a Developer Enterprise Program account that developers can use to distribute internal-use-only apps to employees within large organizations. But if a developer wants to distribute its app to consumers, then the developer must receive a certificate from Apple through an ordinary Developer Program account. This certificate enables developers to sign apps and submit them to the App Store for distribution. Apple pre-installs the App Store on all iOS devices and prevents users from disabling it.

- 15. Before Apple will allow an app to be distributed on its App Store, the app must be reviewed and approved by Apple. This process applies to new apps and to app updates including new code. Nevertheless, app developers can and do make real-time changes to an approved app without adding new code and without requiring users to download a new update from the App Store. There are a number of names and methods for this process including feature flag, hot patch, bug flag, hotfix, feature toggle and server-based update, but each describes the same process. For the purpose of this discussion, I will refer to the process generally as a "hotfix", which is how the process is typically referred to within Epic.
- 16. Hotfixes work by coding the app to check for new content that is available on the developer's server or new instructions on what to make accessible in the app. Hotfixes are commonplace, including for apps designed to run on Apple's mobile devices.
 - 17. Many apps run a check for hotfixes as part of their normal startup process.
- 18. A developer can use hotfixes to make accessible content or features in an app that are in the code but are not initially available to users. The content or feature is accessible only after the app checks the developer's server and is "notified" by the server to display the new content or feature. For example, game developers often include new characters, new items, or

new levels in the code submitted to Apple, which are not initially available to users but become accessible at a later date, once the app is "notified" by the game developer's server that it should make these features accessible.

- 19. As discussed in more detail below, hotfixes are normal features of many apps in the App Store and a common feature in app design. Many apps, including games, connect to the developer's servers upon startup in order to obtain new content and accessibility instructions. I believe Apple is aware of this hotfix process occurring in numerous apps, including *Fortnite*. *Fortnite* has used hotfixes to enable hundreds of new features and content elements since it was first added to the App Store. Many of these hotfixes were not enabled in builds that were submitted to Apple for review or approval, and to my knowledge, Apple has never objected to the use of this process in *Fortnite* in the past. I am not aware of Apple objecting to the use of hotfixes for other apps either.
- 20. Using a hotfix has various benefits to an app developer. For example, hotfixes permit developers to test new features or content, and to easily roll out additional features to users.
- 21. The *Fortnite* app has included a hotfix check upon startup since it was first submitted to Apple. When *Fortnite* is opened on an iOS device, the application connects to Epic's servers to check for new content to download or for "notice" to make pre-existing functionality or content accessible. Since *Fortnite* was launched on the App Store three years ago, Epic has used hotfixes to make all sorts of content and features accessible to players, including: concerts, season ending features, special seasonal promotions, and others.
- 22. Hotfixes are so commonplace that there are companies that specialize in developing software to assist app developers in implementing them, such as Optimizely and CloudBees.

Fortnite Version 13.40

23. On August 3, 2020, Epic submitted Version 13.40 of *Fortnite* for review by Apple for distribution through the App Store. This version of *Fortnite* included a payment process interface that could provide users with multiple options for processing in-app payments. During

the startup process, Version 13.40 queried Epic's servers for information about which payment processing options were available. If the server informed the app that only one option was available, then users making in-app purchases would see a screen with that option and continue with the purchase using that option. If the server instead informed the app that more than one option was available, then users making in-app purchases would see a screen asking them to select a payment processor.

24. Beginning on the morning of August 13, 2020, when the *Fortnite* app on iOS devices queried Epic's servers as to how many payment processing options were available, the servers informed the app that there were two options—Apple's In-App Purchase and Epic's direct payment. Accordingly, the *Fortnite* app displayed to users making in-app purchases a screen giving them that choice. Epic made this choice of payment processors accessible to users through a commonplace hotfix: the code performed the same server check that it had done previously and upon receiving notice of the two payment options, the code made both options accessible to users. Epic did not download any executable code or interpreted code to the *Fortnite* app as part of the hotfix that made the payment options available.

Apple's Retaliation

- 25. Later on the morning of August 13, 2020, Apple removed *Fortnite* from the App Store. As a result, iOS users who tried to download *Fortnite* for the first time were not able to find the app because it was no longer available in the App Store. Meanwhile, iOS users who tried to update *Fortnite* were prompted with a message which incorrectly stated that "[t]he developer has removed this app from the App Store". Epic, in fact, had not removed the app from the App Store. Attached hereto as **Exhibit A** is a true and correct copy of the message iOS users received when attempting to update *Fortnite* on the Apple App Store.
- 26. Apple then posted two notices to the Resolution Center in App Store Connect, which is the platform through which Apple communicates with software developers who are members of Apple's Developer Program—one on August 13 and another on August 14. That notice, which was posted at 11:22 a.m. Pacific time on August 13, 2020, stated: "We have determined that your app is in violation of the App Store Review Guidelines detailed below. For

these reasons, your app has been removed from the App Store until we receive an update that is compliant with the App Store Review Guidelines." Attached hereto as **Exhibit B** is a true and correct copy of Apple's August 13, 2020 notice.

- 27. The second notice, which was posted at 12:04 a.m. Pacific time on August 14, 2020, stated that Apple "identified several violations of the Apple Developer Program License Agreement" and that Epic's "membership in the Apple Developer Program is suspended". The notice also stated that Epic's "Apple Developer Program account will be terminated if the violations set forth below are not cured within 14 days", and that if Epic's account is terminated, it "may no longer submit apps to the App Store" and "apps still available for distribution will be removed". And, although the notice was posted to the Epic Developer account that submitted *Fortnite*, the notice stated that upon termination of Epic's account, Epic will "lose access . . . [to a]ll Apple software, SDKs, APIs, and developer tools", and specifically referenced harm to Epic's development of the *Unreal Engine*, which is handled through a separate Apple Developer Program account. Attached hereto as **Exhibit C** is a true and correct copy of Apple's August 14, 2020 notice.
- 28. On August 14, 2020, Epic submitted a new *Fortnite* build, Version 13.40.2. In this build, Epic indicated in the "Release notes" submitted to Apple describing "What's New" that the build included "[a]dditional payment options", "new drivable cars" and lower water levels to reveal an in-game location. Epic voluntarily withdrew its initial submission of Version 13.40.2 before Apple reviewed it upon discovering a minor issue with the build. Later that day, Epic resubmitted Version 13.40.2 with identical "Release notes". Attached hereto as **Exhibit D** is a true and correct copy of the text of Epic's August 14, 2020 "Release notes" for Version 13.40.2.
- 29. On August 14, 2020, at 11:46 p.m. Pacific time, Apple rejected *Fortnite* build Version 13.40.2, claiming multiple violations of the App Store Review Guidelines and the Apple Developer Program License Agreement. Apple stated that Version 13.40.2 violated App Store Review Guideline 3.1.1 because "users are able to purchase digital goods with external purchase mechanisms in your app with the 'Epic direct payment feature'". Attached hereto as **Exhibit E** is a true and correct copy of Apple's August 14, 2020 rejection notice for Version 13.40.2.

- 30. Apple also claimed that Version 13.40.2 violated App Store Review Guidelines 2.3.12 by including "nondescript, temporary, or incomplete information in your app's 'What's New' text," which was "identical" to the "last six 'What's New' text submissions." Ex. E. In fact, however, Epic's "What's New" text submission disclosed "[a]dditional payment options".
- 31. In addition, Apple claimed that Version 13.40.2. violated App Store Review Guidelines 2.3.1 and 2.5.2 by "contain[ing] hidden features" and "download[ing], install[ing], or execut[ing] code which introduced changes to features and functionality in your app". *Id.* Apple also cited Apple Developer License Agreements Sections 3.2.2 and 3.3.3 which prohibit "download[ing] or install[ing] executable code" which "change[s] the primary purpose of the Application" and "unlock[ing] or enabl[ing] additional features or functionality through distribution mechanisms other than the App Store". *Id.* But as explained above, Epic's "direct payment' feature" did not require the downloading or installing or executing of any code. The content was retrieved from Epic's server during the normal start-up check for server-side content that has occurred in *Fortnite* for years.
- 32. Apple also reiterated in its rejection notice that Epic had 14 days from Apple's initial notice on August 14, 2020 to cure the violations in 13.4.0 and submit a compliant version of 13.40.2 which removed the "Epic Direct Payment Feature" or "Apple will exercise its right to terminate your Developer Program membership". *Id.*
- 33. On August 25, 2020, Epic submitted to Apple for review *Fortnite* build Version 14.00, which featured the new Chapter 2, Season 4. The new season was set for release on all platforms on August 27, 2020. Epic separately emailed Apple about the new submissions, explaining as follows: "This build continues to offer customers the choice of in-app purchases through either Apple's payment solution or through Epic direct payment. Epic is submitting this version in case Apple wishes to restore Fortnite to the App Store in time for Season 4 launch". Attached hereto as **Exhibit F** is a true and correct copy of Epic's August 25, 2020 email to Apple.
- 34. On August 26, 2020, at 10:57 a.m. Pacific time, Apple rejected *Fortnite* build Version 14.00. Apple cited the same violations of the App Store Review Guidelines and Apple Developer Program License Agreement that it relied upon in its August 14 rejection notice, even

though Epic once again disclosed that Epic direct payment was being provided to users. With respect to App Store Review Guidelines 2.3.1, Apple noted that "your submission yesterday finally disclosed the presence of the 'Epic direct payment feature'". And with respect to App Store Review Guidelines 2.3.12, which supposedly concerns "Accurate Metadata", Apple claimed that Epic's "What's New" text did not "address or solve Epic's original lack of candor with Apple, nor the disruption that lack of candor caused when Epic unilaterally implemented this undisclosed feature". Attached hereto as **Exhibit G** is a true and correct copy of Apple's August 26, 2020 rejection letter.

- 35. On August 28, 2020, at 11:40 a.m. Pacific time, Apple terminated Epic's Team ID '84 account that was associated with *Fortnite* and certain other Epic games for iOS devices.

 Apple stated in its August 28, 2020 termination notice that Epic had violated the Apple Developer Agreement, the Apple Developer Program License Agreement, and the App Store Review Guidelines. Apple also told Epic that "we will deny your reapplication to the Apple Developer Program for at least a year". Attached hereto as **Exhibit H** is a true and correct copy of Apple's August 28, 2020 termination notice.
- 36. In addition to *Fortnite*, Apple removed from the App Store Epic's other iOS games and apps associated with the Team ID '84 account, specifically *Battle Breakers*, *Spyjinx* and *Infinity Blade Stickers*. Apple also removed *Shadow Complex Remastered* from the Mac App Store because it was associated with the same account. Not only are these apps no longer available for download, but they also cannot be updated, meaning they will soon be obsolete. The termination of Epic's developer accounts also has prevented users who had previously purchased *Fortnite* or the other affected iOS apps from redownloading them from the "Purchased" section of their App Store account. As a consequence, iOS users also will not be able to re-download these apps on any new or replacement devices.
- 37. Apple's actions also have prevented Epic from continuing to offer *Fortnite* and other games for macOS. The Team ID '84 account terminated by Apple supplied the certificate used to sign the macOS version of *Fortnite*. Although it is technically possible to distribute apps for macOS without an Apple certificate, that is not a viable option for large commercial apps such

as Fortnite. If Epic were to attempt to distribute Fortnite now that its developer account has been revoked, the process of running the game for users would be both challenging and alarming. A macOS user who attempted to run a version of Fortnite created without an Apple certificate could not, in the normal course, run the application, and any attempt to do so would trigger an alert that Fortnite "cannot be opened because the developer cannot be verified—macOS cannot verify that this app is free from malware". The notice provides no guidance on how to nevertheless run an unsigned application. Users would thus have to figure out for themselves how to navigate a series of steps and permissions in their devices' security settings that would permit the application to be run notwithstanding the above security warnings. Given the confusion and increased customer support this will add to the user experience on macOS, it is an untenable way for Epic to continue to distribute Fortnite or other games on Mac computers.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct and that I executed this declaration on September 4, 2020, in Holly Springs, North Carolina.

/S/ Andrew Grant (Sép 4, 2020 21:33 EDT)

Andrew Grant